

EXHIBIT B

WAVE SYSTEMS CORP.
480 Pleasant Street
Lee, Massachusetts 01238

PROXY STATEMENT

2004 ANNUAL MEETING OF STOCKHOLDERS to be held on June 21, 2004

General

This Proxy Statement is being furnished to the holders of the common stock, \$.01 par value per share (the "Common Stock") of Wave Systems Corp., a Delaware corporation (the "Company"), in connection with the solicitation by the Board of Directors of proxies for use at the 2004 Annual Meeting of Stockholders to be held on, June 21, 2004 (the "Annual Meeting") commencing at 4 p.m., at The New York Helmsley Hotel, 212 East 42nd Street, New York, New York, and at any adjournments or postponements thereof. The matters to be considered and acted upon at the meeting are described below in this Proxy Statement.

The principal executive offices of the Company are located at 480 Pleasant Street, Lee, Massachusetts 01238. The approximate mailing date of this Proxy Statement and the accompanying proxy is May 21, 2004.

Voting Rights and Votes Required

Only stockholders of record at the close of business on April 27, 2004 will be entitled to notice of, and to vote at, the Annual Meeting. As of such record date, the Company had outstanding 67,133,415 shares of Class A Common Stock and 205,725 shares of Class B Common Stock. Each stockholder is entitled to one vote for each share of Common Stock held on the matters to be considered at the Annual Meeting. The holders of a majority of the outstanding shares of Common Stock will constitute a quorum for the transaction of business at the meeting. Shares of Common Stock present in person, or represented by proxy (including shares of Common Stock, which abstain or do not vote, with respect to one or more of the matters presented for stockholder approval) will be counted for purposes of determining whether a quorum exists at the meeting.

The affirmative vote of the holders of a plurality of the shares of Common Stock present or represented at the meeting is required for the election of directors. The affirmative vote of a majority of the total votes present in person or by proxy and entitled to vote at the Annual Meeting is required for approval of the proposals to approve the amendments to the 1994 Employee Stock Option Plan to increase the number of shares of Class A Common Stock authorized for issuance thereunder, and to extend the termination date of the 1994 Non-Employee Directors Stock Option Plan.

Abstentions with regard to the election of the nominees for director will be excluded entirely from the vote and will have no effect on the outcome. Abstentions with regard to the amendments to the 1994 Employee Stock Option Plan and the 1994 Non-Employee Directors Plan will be treated as shares of Common Stock that are present and entitled to vote for purposes of determining the number of shares of Common Stock present and entitled to vote with respect to those particular matters, but will not be counted as a vote in favor of such matter. Accordingly, an abstention from voting on either of those matters will have the same legal effect as a vote against such matter. If a broker or nominee holding stock in "street name" indicates on the proxy that it does not have discretionary authority to vote as to a particular matter, including the proposals to amend the 1994 Employee Stock Option Plan and/or the 1994 Non-Employee Directors Plan, those shares of Common Stock will not be considered as present and entitled to vote with respect to such matter.

The accompanying proxy may be revoked at any time before it is exercised by giving a later proxy, notifying the Secretary of the Company in writing, or voting in person at the meeting.

STOCKHOLDERS OF THE COMPANY ARE REQUESTED TO COMPLETE, SIGN, DATE AND PROMPTLY RETURN THE ACCOMPANYING PROXY CARD IN THE ENCLOSED POSTAGE-PREPAID ENVELOPE. SHARES OF COMMON STOCK REPRESENTED BY A PROPERLY EXECUTED PROXY RECEIVED PRIOR TO THE VOTE AT THE ANNUAL MEETING AND NOT REVOKED WILL BE VOTED AT THE ANNUAL MEETING AS DIRECTED BY THE PROXY. IT IS NOT ANTICIPATED THAT ANY MATTERS OTHER THAN THOSE SET FORTH IN THE PROXY STATEMENT WILL BE PRESENTED AT THE ANNUAL MEETING. IF OTHER MATTERS ARE PRESENTED, PROXIES WILL BE VOTED IN ACCORDANCE WITH THE DISCRETION OF THE PROXY HOLDERS.

The Company's Annual Report, including financial statements for the fiscal year ended December 31, 2003, has been mailed to stockholders concurrent with the mailing of this Proxy Statement. The Annual Report, however, is not part of the proxy solicitation material.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table provides information about securities authorized for issuance under the Company's equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	10,490,050	\$ 4.60	2,777,903
The Company's equity compensation plans not approved by security holders	149,365	2.68	—
Total Company plans	10,639,415	\$ 4.57	2,777,903
Wavexpress equity compensation plans not approved by security holders(1)	1,315,062	\$ 1.21	1,157,161

- (1) The Wavexpress equity compensation plan provides grants of options to purchase shares of Wavexpress common stock. Accordingly, the Wavexpress equity plans have no dilutive effect on the existing shareholders of Wave.

The Company's equity compensation plans not approved by security holders are comprised of the following:

In connection with an agreement that the Company entered into with nClose, Inc., an outside software development firm, the Company issued a warrant to purchase 30,000 shares of Class A Common Stock at an exercise price of \$1.00 per share, pursuant to an individual compensation plan with nClose. No additional warrants are required to be granted pursuant to the individual compensation plan for nClose. The warrant is currently exercisable and expires on January 2, 2009.

In connection with a software development agreement that the Company entered into with Archon Technologies, Inc. ("Archon"), the Company issued to Archon a warrant to purchase 50,000 shares of Class A Common Stock at \$3.48 per share, pursuant to an individual compensation plan with Archon

(the "Archon Plan"). The warrant became exercisable on November 9, 2002, and expires on November 9, 2007. No additional warrants are required to be granted pursuant to the Archon Plan.

A director of Wavexpress, Inc., a joint venture between the Company and Sarnoff Corporation, was granted a warrant to purchase 10,000 shares of Class A Common Stock at \$10.00 per share, pursuant to an individual compensation plan with the director, upon acceptance of an offer to serve on Wavexpress' board. This warrant is currently exercisable and expires on August 24, 2004. No additional warrants are required to be granted pursuant to this individual compensation plan.

As a result of the successful placement of 350 shares of Series B preferred stock, a consultant from Digital Media Group, Inc. ("Digital Media") was issued a warrant by the Company to purchase 15,000 Class A Common Stock at a price of \$3.09 per share, pursuant to an individual compensation plan with Digital Media (the "Digital Media Plan"). No additional warrants are required to be granted pursuant to the Digital Media Plan. This warrant is currently exercisable and expires on March 1, 2006.

The following table sets forth certain information concerning the beneficial ownership of the Company's Class A and Class B Common Stock as of April 1, 2004 (except as otherwise noted) by (i) each stockholder who is known by the Company to own beneficially more than five percent of the outstanding Class A or Class B Common Stock, (ii) each director of the Company, (iii) each of the executive officers of the Company named in the Summary Compensation Table below, and (iv) all directors and executive officers of the Company as a group. Holders of Class A Common Stock are entitled to one vote per share on all matters submitted to a vote of the stockholders of the Company. Holders of Class B Common Stock are entitled to one vote per share on all matters submitted to a vote of the stockholders, except that holders of Class B Common Stock will have five votes per share in cases where one or more directors are nominated for election by persons other than the Company's Board of Directors and where there is a vote on any merger, consolidation or other similar transaction, which is not recommended by the Company's Board of Directors. In addition, holders of Class B Common Stock will have five votes per share on all matters submitted to a vote of the stockholders in the event that any person or group of persons acquires beneficial ownership of 20% or more of the outstanding voting securities of the Company. Shares of Class B Common Stock are convertible into shares of Class A Common Stock on a one-for-one basis at the option of the holder.

Beneficial Owner(1)	Number of Shares of Class A Common Stock Owned(2)	Percent of Class	Number of Shares of Class B Common Stock Owned	Percent of Class	Percent of All Outstanding Common Stock(3)
Steven Sprague(4)	2,116,160	3.0	42,102	20.5	3.0
John E. Bagalay, Jr.(5)	136,000	*	0	*	*
Nolan Bushnell(6)	52,000	*	0	1.0	*
George Gilder(7)	218,000	*	2,000	*	*
John E. McConnaughy, Jr.(8)	177,250	*	0	*	*
Gerard T. Feeney(9)	845,000	1.2	0	*	1.2
All executive officers and directors as a group (6 persons)(10)	3,544,410	5.0	44,102	21.5	5.1

* Less than one percent.

(1) Each individual or entity has sole voting and investment power, except as otherwise indicated.

(2) Includes shares of Class A Common Stock issuable upon the conversion of Class B Common Stock.

(3) In circumstances where the Class B Common Stock has five votes per share, the percentages of total voting power would be as follows: Steven Sprague, 3.2%; John E. Bagalay, Jr., less than 1%;

- (4) Includes 1,762,006 shares of Class A Common Stock that are subject to options presently exercisable or exercisable within 60 days. Also includes 37,102 shares of Class B Common Stock held in trust for the benefit of Mr. Steven Sprague's family, and for which Mr. Steven Sprague is a trustee, 7,000 shares of Class A Common Stock held jointly by Mr. Sprague and his spouse, Judith Sprague and 223,500 shares of Class A Common Stock beneficially owned by Mr. Sprague through a limited partnership under which Mr. Sprague shares voting and investment rights with Mr. Peter J. Sprague, Chairman and CEO of Wavexpress and other members of Mr. Sprague's immediate family. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (5) Includes 132,000 shares of Class A Common Stock that are subject to options presently exercisable. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (6) Includes 52,000 shares of Class A Common Stock that are subject to options presently exercisable. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (7) Includes 212,000 shares of Class A Common Stock that are subject to options presently exercisable. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (8) Includes 50,000 shares of Class A Common Stock that are subject to options presently exercisable. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (9) Includes 745,000 shares of Class A Common Stock that are subject to options presently exercisable or exercisable within 60 days. The beneficial owner's mailing address is c/o Wave Systems Corp., 480 Pleasant Street, Lee, MA 01238.
- (10) Includes 2,953,006 shares of Class A Common Stock that are subject to options presently exercisable or exercisable within 60 days.

PROPOSAL NO. 1

ELECTION OF DIRECTORS

At the Annual Meeting, five directors are to be elected, each to hold office until the next annual meeting of stockholders and until his respective successor has been duly elected and qualified. If no direction is given to the contrary, all proxies received by the Board of Directors will be voted "FOR" the election as directors of each of the following nominees. In the event that any nominee declines or is unable to serve, the proxy solicited herewith may be voted for the election of another person in his stead at the discretion of the proxies. The Board of Directors has no reason to believe that any of the nominees will not be available to serve. Set forth below is the name and age of each nominee, their position with the Company, if any, the year in which each first became a director, the principal occupation and employment of each over the last five years and other directorships, if any. Each nominee is currently a director of the Company.

The Board of Directors recommends that the Stockholders vote "FOR" the election of each of the nominees.